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10/536,866	05/27/2005	Yasuhito Niikura	00862-521154,	4585
5514	7590	06/24/2009	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			TSUI, WILSON W	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/536,866	<b>Applicant(s)</b> NIIKURA ET AL.
	<b>Examiner</b> WILSON TSUI	<b>Art Unit</b> 2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 13 April 2009.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-6,8-17 and 19-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6,8-17 and 19-21 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement (PTO-156/08)  
 Paper No(s)/Mail Date 20090311, 20090413
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

1. This non-final action is in response to the amendment filed on: 04/13/09, and IDS filed on: 03/11/09, and 04/13/09.
2. Claims 1-6, 8-17, and 19-21 are amended. Claims 7, 18, and 22-24 are cancelled. Thus, claims 1-6, 8-17, 19-21 are pending. Claims 1, 12, and 21 are independent claims.
3. The objection to claim 19 due to informalities is withdrawn, as necessitated by applicant's amendment.
4. The following rejections are withdrawn, in view of new grounds of rejection necessitated by applicant's amendments:
  - Claims 1 – 6, 8-10, 12-17, 19, and 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Min et al, in view of Wiley, and further in view of Tohki.
  - Claims 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Min et al, and Wiley, and further in view of Tohki, in further view of Hattenlocher et al.

***Priority***

5. Acknowledgment is made of applicant's claim for foreign priority (with respect to foreign application: Japan 2004-090064 03/25/2004) under 35 U.S.C. 119(a)-(d). The certified copy of the priority document is confirmed to be received.  
Acknowledgment is made of applicant's claim for continuing data (with respect to the application being a 371 of PCT/JP05/05444 03/17/2005).

***Information Disclosure Statement***

6. The information disclosure statement (IDS) submitted on 03/11/09, and 04/13/09 is being considered by the examiner.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-6, 8 - 10, 12-17, 19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al (US Patent: 6032147, issued: Feb. 29, 2000, filed: Mar. 27, 1997), in further view of Singh et al (US Patent: 6,490,597 B1, issued: Dec. 3, 2002, filed: Jul. 14, 1999).

With regards to claim 1, Williams et al teaches a data processing apparatus for processing data for respective pages, comprising:

*A data reception unit for receiving data of a first encoding format for respective pages* (column 2, lines 45-47: whereas one or more encoded formats are received, the formats including page data, such as internet pages (column 2, lines 15-22);

*A control unit for generating a single page data management record that manages the data of the first encoding format in association with first encoding*

*information indicating the first encoding format (column 2, lines 45-47: whereas the data of the first encoding format is managed by storing in a universal format);*

*A plurality of output processors, each for independently executing a respective output process for data of a predetermined encoding format (column 2, lines 48-51: whereas a conversion process can be executed), and*

*A data generation unit for generating data of a second encoding format from the data of the first encoding format, wherein the second encoding format is an encoding format used by one of the plurality of output processors (column 2, lines 48-51: whereas as second output format/encoding can be generating using data from first encoding format),*

*Wherein, upon generation of the data of the second encoding format, said control unit causes said page data management record to manage the data of the second encoding format in association with second encoding information indicating the second encoding format in a manner such that the second encoding information is associated with the first encoding information (column 3, lines 30-56: whereas the second encoding information is associated with the first encoding information, such that data of first encoding format and information can be mapped/forwarded automatically to the second encoding format).*

However, although Williams et al teaches a temporary storage of management records during a conversion/association to an output encoded format (column 3, lines 41-47). Williams et al does not expressly teach *wherein said control unit deletes said*

*page data management record if none of said plurality of output processors refers to said page data management record.*

Yet, Singh et al teaches *wherein said control unit deletes said page data management record if none of said plurality of output processors refers to said page data management record* (Abstract: whereas, data is checked for referential activity/freshness/storage-state, and when data is outdated/not-referred-to-by-a-“recent”-process, it is removed from the system).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified Williams et al's page data management record (which is contains data used by output processes), such that the page data management record is deleted, upon a stale referral condition, as taught by Singh et al. The combination of Williams et al and Singh et al would have allowed Williams et al to have "improved information management software to make it easier and less cumbersome to update and maintain a database" (Singh et al, column 48-50), [by] removing from a portion of memory, stale or irrelevant objects (Singh et al, column 2, lines 28-31).

With regards to claim 2, which depends on claim 1, Williams et al teaches *wherein said control unit generates said page data management record in a memory in response to reception of the data of the first encoding format for respective pages* (Abstract: whereas, data is received, and managed in a universal format).

With regards to claim 3, which depends on claim 1, Williams et al and Singh et al teaches *wherein said control unit monitors storage states of the data of the first and second encoding formats in a memory, and deletes the data of the first encoding format or the data of the second encoding format in accordance with the storage states and a reference state by the plurality of output processors*, as similarly explained in the rejection for claim 1, and is rejected under similar rationale.

With regards to claim 4, which depends on claim 3, Williams et al teaches *wherein when an output processor issues an instruction of an output process after the data of the first encoding format is deleted, said control unit controls said data generation unit to generate data in an output encoding format suited to the output process from the data of the second encoding format* (column 3, lines 46-57: whereas the first encoding format is received (but not saved), and converted into a common/universal format. The data in the universal format from the first encoded format is then used to generate data in an output encoding format, suited for an output host device).

With regards to claim 5, which depends on claim 4, Williams et al teaches *wherein said control unit causes said page data management record to manage the data of the output encoding format in association with the data of the second encoding format* (column 3, lines 46-57: whereas management information is used to know how to convert and produce output/second encoding format).

With regards to claim 6, which depends on claim 5, Williams et al and Singh teaches *wherein upon completion of use of the data of the output processor, said control unit releases information of the data of the output encoding format from said page data management record*, as similarly explained in the rejection for claim 1 (when there is no further reference to conversion data (stale), the memory is released), and is rejected under similar rationale.

With regards to claim 8, which depends on claim 3, Williams et al teaches *wherein when said control unit determines that storage of the data of the first encoding format in the memory is complete, said control unit permits said data generation unit to start a data generation operation of the data of the second encoding format from the data of the first encoding format* (column 3, lines 46-57: whereas, the data of the first encoding format is received first, and converted into a universal format. Afterwards, a data generation/conversion process is executed to start generation of the second encoding format).

With regards to claim 9, which depends on claim 8, Williams et al teaches *wherein said control unit monitors completion of the generation operation of said data generation unit and a storage state of the data of the second encoding format in the memory, and permits a predetermined process for the data of the second encoding*

*format to execute in accordance with the storage state* (column 7, lines 49-67: whereas the storage/memory- receiving state is monitored , in order to implement transactions).

With regards to claim 10, which depends on claim 9, Williams et al teaches *wherein a separate page data management record is generated for data of each page received by said data reception unit, and when data including a plurality of pages are received, said control unit causes the plurality of said page data management records to manage the data of the first and second encoding formats of each page while associated respective pages with each other* (Abstract, column 5, lines 40-55: whereas one or more page records are created /converted into universal format. Additionally, control logic is used to automatically manage which record data in a first encoding format is to be ultimately sent to an output device that uses a second encoding format)

With regards to claim 12, for a data processing method for processing data for respective pages, similar to the method performed by the apparatus of claim 1, is rejected under similar rationale.

With regards to claim 13, which depends on claim 12, for performing a method similar to the method performed by the apparatus in claim 2, is rejected under similar rationale.

With regards to claim 14, which depends on claim 12, for performing a method similar to the method performed by the apparatus in claim 3, is rejected under similar rationale.

With regards to claim 15, which depends on claim 14, for performing a method similar to the method performed by the apparatus in claim 4, is rejected under similar rationale.

With regards to claim 16, which depends on claim 15, for performing a method similar to the method performed by the apparatus in claim 5, is rejected under similar rationale.

With regards to claim 17, which depends on claim 16, for performing a method similar to the method performed by the apparatus in claim 6, is rejected under similar rationale.

With regards to claim 19, which depends on claim 18, for performing a method similar to the method performed by the apparatus in claim 10, is rejected under similar rationale.

With regards to claim 21, for a computer program for making a computer execute a data processing method of claim 12, is rejected under similar rationale as the rejection for claim 12 above.

8. Claims 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al (US Patent: 6,032,147, issued: Feb. 29, 2000, filed: Mar. 27, 1997), in view of Singh et al (US Patent: 6,490,597 B1, issued: Dec. 3, 2002, filed: Jul. 14, 1999), and further in view of Hattenlocher et al (US Patent: 5,884,014, issued: Mar. 16, 1999, filed: May 23, 1996).

With regards to claim 11, which depends on claim 1, Williams et al teaches *wherein the first encoding format is one of a plurality of data formats, including raw data* (whereas the format can be an optional data format), *and the data of the second encoding format*, as similarly explained in the rejection for claim 1, and is rejected under similar rationale.)

However, Williams et al does not teach the data of the second encoding format has a *JBIG format*.

Yet, Hattenlocher et al teaches the data of the second encoded format *has a JBIG data format* (column 26, lines 42-52: whereas JBIG is a secondary format through conversion).

It would have been obvious to one of the ordinary skill in the art at the time of the invention to have modified William et al's second format, such that it would have been a

JBIG data format, as taught by Huttenlocher et al. The combination of Williams et al, Singh et al, and Huttenlocher et al would have allowed Williams et al to have "implemented a known encoding technique", such that large data sets are converted into more compact representations from the original large data sets, by implementing known encoding techniques such as JBIG (Huttenlocher, column 3, lines 45-50, column 4, lines 20-25).

With regards to claim 20, which depends on claim 12, for performing a method similar to the method performed by the apparatus of claim 11, is rejected under similar rationale.

***Response to Arguments***

9. Applicant's arguments with respect to claims 1-6, 8-17, 19-21 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILSON TSUI whose telephone number is (571)272-7596. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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June 18, 2009